

Appendix C

Facilities Assessment Analysis

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Because structures at the Auxiliary Reactor Area (ARA) and Power Burst Facility (PBF) are proximal or “co-located” to Waste Area Group (WAG) 5 sites identified in the Federal Facility Agreement and Consent Order (FFA/CO) (DOE-ID 1991), a facilities assessment analysis was performed to address the potential of ARA and PBF structures to cause the baseline risk for WAG 5 to be underestimated. The facilities assessment analysis included reviews of past and present operational activities at ARA and PBF, existing facilities and structures, and management control procedures. A list of screening criteria for eliminating or retaining buildings and structures was developed. All facilities and structures that are not currently identified as sites in the FFA/CO, including those no longer being used for their original missions, abandoned facilities, and facilities in standby mode, were evaluated.

The ARA facilities (ARA-I, -II, -III, and -IV), originally called the Army Reactor Area, were constructed in the 1950s to support the Army Nuclear Program. The group of facilities became the ARA in 1965 after the army program was discontinued and all reactors were removed. From 1966 to 1989, work at the ARA included a variety of technical support services for Idaho National Engineering and Environmental Laboratory (INEEL) research and development programs that included a metallurgy laboratory, an instrument development laboratory, and a hot cell facility. The ARA has been operationally inactive since 1989. At ARA-IV, decontamination and dismantlement (D&D) were completed in 1985 and contemporary operations are limited to occasional explosives testing. Currently, ARA-I, -II, and -III are in the final stages of D&D. Most structures have been razed, and many of the sites, especially No Action sites (DOE-ID 1991) such as the ARA-07 seepage pit, no longer exist. The ongoing D&D program at ARA-I, -II, and -III has not yet produced documents recording D&D activities. As information becomes available, it may be necessary to reevaluate the accuracy of ARA information.

The PBF comprises five separate facilities, which were constructed during the late 1950s to house the control area and four Special Power Excursion Reactor Test (SPERT) reactors for experiments involving reactor transient behavior and safety. The SPERT experiments were terminated in 1970. All SPERT reactors have been removed, and most of the facilities underwent partial or complete D&D. In 1972, the area was converted to the Power Burst Facility (PBF). The PBF currently supports five active programs: the Waste Reduction Operations Complex (WROC), which provides administrative support to the PBF Control Area; the PBF Reactor adjacent to the location of the original SPERT-I facility; the Waste Engineering Development Facility (WEDF) at the SPERT-II facility; the Waste Experimental Reduction Facility (WERF), once known as SPERT-III; and the Mixed Waste Storage Facility (MWSF), originally SPERT-IV. The WROC encompasses the personnel and administrative offices that support operations at the PBF Reactor Area, WEDF, WERF, and the MWSF. The PBF Reactor was constructed just north of the old SPERT-I facility. This program examined pressurized water reactor fuel rods under normal and off-normal operating conditions and hypothetical reactor accidents. The program was completed in 1985, and the reactor was placed on standby. The reactor fuel has been removed. The WEDF is a repackaging facility for surrogate materials and a storage facility for lead and low-level radioactive materials. The WERF is an active RCRA-permitted mixed waste incinerator. The MWSF is a RCRA-permitted mixed waste storage facility in which low-level mixed waste, including PCB-contaminated waste, is stored.

C-1. SCREENING CRITERIA

The facilities assessment implemented a screening methodology to evaluate the facilities proximal to sites within WAG 5. Past and current uses of structures and buildings in WAG 5 were reviewed to identify proximal facilities and operations that could impact the comprehensive risk evaluation. A facility or structure was eliminated if it met any of the following criteria:

- 1) Hazardous materials or waste were never processed, stored, or used at the facility. Such facilities include personnel offices, nonhazardous material storage areas, training and security buildings, personnel support buildings, nonhazardous liquid storage (i.e., raw water storage tanks, and towers) water facilities, electrically driven raw pumping facilities, and facility maintenance shops.
- 2) Potential residual risk will either be addressed by D&D or forwarded to WAG 5 management for evaluation under CERCLA.
- 3) The facility or operation is permitted through other programs.
- 4) The facility or operation has no history of past releases that would impact the cumulative risk at WAG 5 and is currently operated with appropriate management controls.
- 5) The facility has a history of releases that have been appropriately managed, and current operations are under appropriate management control programs that address the prevention of and response to potential releases.
- 6) Decontamination and dismantlement have been completed at the facility and the remaining structures have been secured (i.e., the structure is abandoned in place according to procedures and does not pose a probable hazard), and no further action planned.

It is assumed that electrical power poles, electrical power lines, transformers, and grounding cables will be removed at closure by the INEEL Power Management at the Central Facilities Area, and that all telephone poles, telephone lines, alarm wires, fiber optics cables, control cables, instrument cables, and raw water lines between PBF areas will be removed and disposed of by WROC.

C-2. REVIEW OF AUXILIARY REACTOR AREA MANAGEMENT CONTROLS

An integral part of the facilities assessment analysis was the review of management control procedures to mitigate potential releases to the environment. Such procedures are minimal for the ARA facilities in the final stages of D&D. However, D&D at ARA-I, -II, and -III has been implemented in compliance with regulatory requirements that limit residual radioactive potential uptake to 100 mR/year and that also specify activities to coordinate D&D with CERCLA (DOE Order 5480.2A). When D&D is complete, the responsibility for managing the areas will remain under the WAG 5 CERCLA program.

The ARA-IV facility currently supports explosives testing under the management of the LMITCO Applied Engineering and Development Laboratory. The current date for the expected completion of the ARA-IV activities is 2007, after which ownership of the ARA-IV facility will be turned over to various as yet unidentified programs for final disposition.

C-3. REVIEW OF POWER BURST FACILITY MANAGEMENT CONTROLS

For the PBF area, the documents and procedures that define mitigation of potential releases to the environment include safety analysis reports for nuclear facilities, RCRA contingency plans, closure and post closure plans, applicable permits, and facility operations manuals.

C-3.1 Power Burst Facility Nuclear Safety Analysis Reports

In accordance with U.S. Department of Energy Order 5480.23, a safety analysis is required for the operation of DOE nuclear facilities, defined in this order to include reactor and nonreactor nuclear facilities that function as follows:

- “(1) Produce, process, or store radioactive liquid or solid waste, fissionable materials or tritium
- (2) Conduct separation operations
- (3) Conduct irradiated materials inspection, fuel fabrication, decontamination, or recovery operations
- (4) Conduct fuel enrichment operations
- (5) Perform environmental remediation or waste management activities involving radioactive materials.”

The order further requires the following, as part of the safety analysis:

“Contractors shall be required to perform a hazard analysis of their nuclear activities and classify their processes, operations, or activities in accordance with the following requirements:

1. **Classification Categories**—The consequences of unmitigated releases of radioactive and/or hazardous materials shall be evaluated and classified by the following hazard categories:
 - (a) *Category 1 Hazard.* The hazard analysis shows the potential for significant offsite consequences.
 - (b) *Category 2 Hazard.* The hazard analysis shows the potential for significant onsite consequences.
 - (c) *Category 3 Hazard.* The hazard analysis shows the potential for only significant localized consequences.
2. **Inventory of Hazardous Materials**—The hazard analysis shall be based on an inventory enveloping all radioactive and hazardous materials that are stored, utilized, or may be formed within the nuclear facility.

3. **Evaluation of Potential Releases**—The hazard analysis shall identify energy sources or processes that might contribute to the generation or uncontrolled release of hazardous materials. The hazard analysis shall estimate the consequences of accidents in which the facility or process and/or materials in the inventory are assumed to interact, react, or be released in a manner to produce a threat or challenge to the health and safety of individuals on site and off site.”

Safety analysis reports (SARs) developed in compliance with these requirements address inventories of potentially releasable radioactive and hazardous materials. The SARs specify the physical and administrative barriers to such releases and discuss the types of accidents that might breach the barriers. Guidance in DOE Standard DOE-EM-STD-5502-94, “Hazard Baseline Documentation,” defines radioactive material inventory levels that constitute the threshold of each hazard category. Though category thresholds are not defined for nonradioactive hazardous materials, the concepts of “localized,” “onsite,” and “offsite” consequences of a release are applied to those materials as well.

By definition, nonnuclear facilities either have no radioactive inventories or radioactive inventories below the Category 3 threshold of the DOE baseline guidance (in accordance with DOE-EM-STD-5502-94).

A hazard analysis is performed for most facilities and operations at the INEEL. The analysis identifies the potential hazard of an operation and helps initially categorize a facility or operation for further analysis according to the level of hazard established. The only operations potentially excluded from hazard analysis are those for which the associated hazards are obviously of a nature routinely accepted by the public. However, even those activities comply with a requirement to maintain material safety data sheets on even small amounts of hazardous materials.

Safety analysis reports have been developed for the PBF Reactor (Mobely 1971), the WERF (LMITCO April 1997), and the MWSF (LMITCO June 1997). Because the WROC is an administrative area, it is not classified as a nuclear facility. Therefore, a SAR is not required for the WROC. Activities had been planned at the WEDF that would have required development of a safety analysis report and other documents. However, because of a change in priorities, the plans were discontinued before December 1990. A letter (Sato 1992) documented a mutual agreement between the Department of Energy Idaho Operations Office (DOE-ID) and the INEEL management and operations contractor that preparation of the SAR should not continue because of the cancellation of the activities at the WEDF. The draft WEDF SAR was never completed or implemented.

C-3.2 Power Burst Facility Emergency Plan/RCRA Contingency Plan

The actions that will be taken at PBF to minimize hazards to human health or to the environment from fires, explosions, or any unplanned releases of radioactive, hazardous, or mixed waste or waste constituents to the air, soil, or surface water at the INEEL are described in the *INEEL Emergency Plan/RCRA Contingency Plan* (LMITCO August 1997a, August 1997b). The provisions of the plans will be implemented immediately after any event that could threaten human health or the environment. The plans have been prepared to satisfy all relevant requirements for contingency plans for facilities under the purview of the RCRA (42 USC § 6901 et seq.).

Operations at PBF facilities that have the potential to release hazardous substances (as listed in 40 CFR 116, 302, 355, and 372) or petroleum products to the environment are responsible for implementing spill avoidance and response requirements. The only exceptions are operations that store the hazardous substances in the same form and concentration as a product packaged for distribution and use by the general public. Facilities within the PBF area that have been identified as potentially needing to implement the spill and response requirements are the PBF Reactor, WERF, and the MWSF. Specific actions, general policies, and responsibilities for spill avoidance and response requirements are defined in the *INEEL Emergency Plan/RCRA Contingency Plan* (LMITCO August 1997a, August 1997b).

C-3.3 Power Burst Facility RCRA Closure and Post-Closure Plans

The intent of RCRA closure plans and post-closure plans is to define measures to minimize or eliminate the potential for post-closure releases of residual contaminants and the migration of waste decomposition products to the soil, groundwater, and atmosphere. For the RCRA-permitted WERF and the MWSF, post-closure releases of hazardous, radioactive, or mixed waste; constituents of the waste; and contaminated run-off to the ground will be prevented by the removal of all waste and residuals as well as all contaminated equipment in accordance with RCRA closure requirements (LMITCO November 1996; LMITCO February 1997; LMITCO March 1997). However, applicable regulations for the future closures of the WERF and MWSF may change. Therefore, requirements will be defined to comply with regulations applicable at the time of closure.

The other facilities at PBF, the WROC, the PBF Reactor, and the WEDF, are not regulated by RCRA. Therefore, RCRA closure plans have not been developed.

C-3.4 Resource Conservation and Recovery Act Part B Permit Application

An intent of the RCRA Part B Permit Application for the INEEL (LMITCO November 1996), which allows the operation of the WERF and the MWSF, is to define contaminant release limits for the operating lives of the facilities. In addition, the permit sets limits for the types of waste and concentrations of contaminants that can be treated (i.e., incinerated or stored) at the facilities. Compliance with permit standards is confirmed by verification sampling, and maintenance of an operations logbook and a log of the treatment of each waste stream.

C-3.5 Additional Controlling Documents for the Power Burst Facility

In addition to the applicable SARs, closure plans, and permits, operations at each facility within PBF are conducted in accordance with procedures specific to the operations housed within the facility. These procedures define operating protocols, safety measures, maintenance, and other requirements for the facility. The procedures for the PBF Reactor are contained in the *Power Burst Facility Operating Manual*. The PBF Reactor is currently in standby mode. Technical specifications and standards applicable in the interim before the reactor fuel is removed are in the PBF Basis for Interim Operation (BIO) for the PBF Reactor Area (LMITCO 1995). In addition, controlling documents also include stand-alone technical procedures. For the WEDF, controlling documents include the WROC Lead Storage Facility Manual. Standard operating procedures and the WEDF SAR are components of this manual. Operations at the WERF are governed by the WERF Operating and Maintenance Manual, which includes standard and detailed operating procedures, abnormal procedures, descriptions of

systems, and maintenance requirements. For the MWSF, operations are defined in the Mixed Waste Storage Facility Manual.

C-4. CONCLUSIONS

The facilities analysis addressed both active and inactive systems at ARA and PBF. The screening of facilities and structures is provided in Tables C-1 and C-2 for the ARA and PBF areas, respectively. For completeness, the ARA and PBF CERCLA sites are listed in Tables C-3 and C-4.

Several designation codes are used in the tables. Auxiliary Reactor Area designations by roman numerals I, II, III, and IV indicate the four separate ARA facilities. Auxiliary Reactor Area designations followed by three-digit arabic numerals are used to identify a building, facility, structure, tank, or improvement, and two-digit arabic numbers indicate a CERCLA site. In some cases, a building, facility, structure, tank, or improvement may be synonymous with a CERCLA site and, therefore, will have both a two-digit and a three-digit arabic designator. For example, ARA-737 is the operational identifier for the ARA-I Sewage Treatment Facility, which also is identified as CERCLA Site ARA-04. The PBF facilities were originally constructed to house the SPERT program, indicated by roman numerals I through IV. Facilities and structures within the PBF have are identified as three-digit arabic numbers preceded by PBF. Many of the SPERT structures originally were assigned Power Excursion Reactor (PER) designators. Therefore, old documents and engineering drawings use the PER acronym; however, most contemporary references use PBF. The same facility or structure may be referenced both ways in various documents. For example, building PER-613 originally housed the SPERT-IV reactor. The same structure is now known as the MWSF, or PBF-613. All CERCLA sites within PBF have two-digit arabic codes following the PBF designator, such as PBF-01. Typically, across the Site, buildings have 600-series numbers and other improvements (e.g., tanks, pumps, and stacks) have 700-series codes.

In conclusion, appropriate management controls are in place for all buildings and structures with a potential to impact cumulative risk at WAG 5. Therefore, the facility assessment analysis did not identify any sites in addition to those identified under CERCLA with a potential to impact cumulative risk as WAG 5. Note that though a facility or structure may be eliminated based on one of the facility assessment analysis screening criteria (see Section C-1), it will still be subject to objectives that will be defined in the record of decision (ROD) for the WAG 5 comprehensive remedial investigation/feasibility study.

Table C-1. Facilities assessment analysis of buildings and structures within the Auxiliary Reactor Area.

Operational Designation	Description	Sources of Information	Managing Program	Notes	Screening Step
ARA-I		For general information about the ARA area, see Footnote a, Martinson (March 1997), and LMITCO (December 1996a).			
ARA-626	Hot Shop	As-built site drawing 102711 (1960)	D&D	D&D is under way. The building shell and utilities are remaining.	2
ARA-II					
ARA-604	Guard house	Technical site information, Facility Land Use Plan (1997)	D&D	The guard house will be dismantled under D&D.	2
ARA-III					
ARA-609	Guard house	Technical site information, Facility Land Use Plan (1997)	D&D	The guard house will be dismantled under D&D.	2
ARA-610	Storage building	Technical site information, Facility Land Use Plan (1997)	D&D	The storage building will be dismantled under D&D. The building and stored contents are nonhazardous and nonradioactive. The building was originally thought to be retained as a storage unit for activities in the ARA areas. ^b	2
ARA-622	Storage building	Technical site information, Facility Land Use Plan (1997)	D&D	The storage building will be dismantled under D&D. The building and stored contents are nonhazardous and nonradioactive. The building was originally thought to be retained as a storage unit for activities in the ARA areas. ^b	2
	Two boiler room blow down lines	As-built site drawing 102565 (1959)	D&D	Information about residual artifacts to the CERCLA program will be provided under D&D. Two boiler room blow down lines discharged to the surface of the ground from the heating and air conditioning system. A radiological survey was performed when the pipe was removed.	2
	Reactor building waste disposal system	As-built site drawing 102647 (1958)	D&D	Heater Sump Pit.^k This sump and all piping that drained to it are gone. The soil removed was less than 10 ft belowgrade. Mechanical Loop Sump Pit.^k The pit was the main sump to which all other sumps in this part of the building drained. The sump remains, as well as all piping at a depth of more than 10 ft belowgrade. The contents of this sump (radioactive liquid) were removed and treated by ion exchange. Holes were then punched in the bottom of the sump with a jack hammer attachment on the end of a backhoe so that liquid would not accumulate. Contaminated Work Area Sump Pit.^k This sump remains as well as all piping at a depth of more than 10 ft belowgrade. The contents of this sump (radioactive liquid) were removed and treated by ion exchange truck. Holes were then punched in the bottom of the sump with a jack hammer attachment on the end of a backhoe so that liquid would not accumulate.	6
	Cooling tower drain line	As-built site drawing 150706 (1962)	D&D	The new drain line from the cooling tower remains in place. ^l However, the "new" drain line was not found. A drain line from the northwest corner was found and surveyed for radiation but none was found. The line was left in place.	2

Table C-1. (continued).

Operational Designation	Description	Sources of Information	Managing Program	Notes	Screening Step
ARA-IV					
		Rhoades (1988), Korth and Webber (1997), and Footnotes f, m, n, o, p, q, and r			
	High pressure nitrogen pipe	G. E. Korth	Dynamic Processing Facility	A 1-in. black coated pipe, which is labeled a high pressure nitrogen line, extends from the road to the facility adjacent to the berm. The pipe extends in the general direction of the bunker and passes into a culvert under the turnaround area. No exit of this pipe or the culvert was found. ^{i, n, s, t} Removal is planned under the <i>Comprehensive Facility and Land Use Plan</i> (DOE-ID 1997)	5
	Fuel tank connection line			South of the D&D monument, three pipes remain that were connected to the fuel tank (Rhoades 1988) were observed:	5
				<ul style="list-style-type: none"> A 4-in. aluminum colored pipe. One end extends into the air and the other end, to which a valve is attached, extends horizontally. A 1-in. pipe extends into the air, possibly 1-in. fuel oil return line. (See as-built site drawing 102784 [1961].)^s A 3-in. red pipe extending into the air with a black plastic cap attached to the other end was exposed for about 40 ft. 	
	Contaminated waste tank vault			Removal is planned under the <i>Comprehensive Facility and Land Use Plan</i> (DOE-ID 1997) See Footnotes s and t. Removal is planned under the <i>Comprehensive Facility and Land Use Plan</i> (DOE-ID 1997)	3
	Capped and locked well	See Footnote h		The well casing, cap, and lock remain.	1
	Chlorine contact chamber			A steel tank remains. ^{f, s, t} Removal is planned under the <i>Comprehensive Facility and Land Use Plan</i> (DOE-ID 1997)	2
ARA Utilities					
	Underground utilities on east side of ARA-608		D&D	Uncapped heating oil, propane, and water lines from the east side of ARA-608 remain. When the ARA-608 building was demolished, heating oil and propane tanks were removed. In addition, heating oil, propane, and water lines were removed on the east side of the former location of ARA-608 to a distance of about 20 ft from the building. Residual materials, if any, are assumed to be of small quantities and not sufficient to present a hazard.	2
	Electrical power poles		Power Management	The poles are retained to maintain power to ARA areas. ^h	2
	Water system fixtures	Inspection on October 20, 1997. ⁱ	D&D	Two stand pipes and three belowgrade shutoff valves outside the south corner of the facility fence were confirmed to be part of the water system. ^h	4

a. D. J. Kenoyer, January 6, 1998, Interdepartmental e-mail to Carla Beckman, "ARA," Lockheed Martin Idaho Technologies Company. Summarizes facilities, roads, and parking lots that are planned to be left at ARA areas after decontamination and dismantlement.

Table C-1. (continued).

- b. Dietz, C. G., February 19, 1998, Interdepartmental e-mail to G. P. Pell III, Lockheed Martin Idaho Technologies Company. Documents November 20, 1997, telephone conversation between C. G. Dietz and G. P. Pell III, which provided verification of a hot radioactive waste line draining radiologically contaminated waste from the ARA-627 building to the ARA-16 (729) radionuclide tank. The line remains in the ground but the leak has been plugged.
- c. Jones, R. K., January 15, 1998, Interdepartmental e-mail to F. L. Webber, Lockheed Martin Idaho Technologies Company.
- d. R. V. Nelson performed an inspection of the site on October 15, 1997.
- e. During a site visit on October 10, 1997, the following was observed:
- The white wooden fence surrounding the AEC monument for this area may need some repairs.
 - A mound of dirt 4 ft high, 20 ft in diameter, and about 100 ft from the west of the ARA-II fence. The status of the mound is unknown.
- f. Kraft, M. S., December 23, 1997, Interdepartmental e-mail to C. G. Dietz, "ARA-II Tank Surveys," Lockheed Martin Idaho Technologies Company. Summarizes information from nonintrusive surveys conducted at ARA-II and ARA-IV sites.
- g. All trenches that were opened as part of the decontamination and dismantlement of ARA-III were surveyed for radiation as the pipe was being exposed and also before backfilling.
- h. Fenn, S. T., October 20, 1997.
- i. The October 20, 1997, inspection was performed by C. G. Dietz.
- j. Fenn, S. T., August, 13, 1997.
- k. Holdren, K. J., October 2, 1997.
- l. Fenn, S. T., January 22, 1998.
- m. Dietz, C. G., August 28, 1997, Interdepartmental e-mail to G. E. Korth, "Applied Engineering Development Lab Facilities at ARA-IV," Lockheed Martin Idaho Technologies Company. Summarizes the position of ARA-IV Dynamic Processing Facility management about the status of ARA-IV.
- n. Korth, G. E., November 11, 1997, Interdepartmental e-mail to C. G. Dietz, "ARA-IV Info," Lockheed Martin Idaho Technologies Company. Establishes the location of some items at ARA-IV.

Table C-1. (continued).

o. Dietz, C. G., November 13, 1997, Interdepartmental e-mail to M. E. Gregory, "Power Management Interface for ARA/PBF Areas," Lockheed Martin Idaho Technologies Company.

Delineates Power Management ownership of equipment at ARA and PBF.

p. Korth, G. E., December 2, 1997, Interdepartmental e-mail to C. G. Dietz, "Scheduled Mission End Date for ARA-IV," Lockheed Martin Idaho Technologies Company. Advises of request to extend mission of ARA-IV from 1997 to 2007.

q. Korth, G. E., December 12, 1997, Interdepartmental e-mail to F. L. Webber, "Spills or Releases at ARA-IV," Lockheed Martin Idaho Technologies Company. Provides status of spills and releases at ARA-IV.

r. Webber, F. L., December 15, 1997, Interdepartmental e-mail to C. G. Dietz, "Spills or Releases at ARA-IV," Lockheed Martin Idaho Technologies Company. Expresses concern about funding for a proper closure, with acceptable contamination levels, of the ARA-IV Dynamic Processing Facility.

s. Dietz, C. G., Interdepartmental e-mail to F. L. Webber, "12 November 97 Visit to ARA-IV with Lance Gurney," Lockheed Martin Idaho Technologies Company. Summarizes inspection of ARA-IV items by C. G. Dietz and L. W. Gurney to determine the status of specific items, including a 1-in. diameter pipe, remaining after the removal of a fuel tank at ARA-IV.

t. Dietz, C. G., December 2, 1997, Interdepartmental e-mail to F. L. Webber, "Summary of 2 December Visit to ARA-IV," Lockheed Martin Idaho Technologies Company. Summarizes inspection by C. G. Dietz and M. J. Jaussi at ARA-IV to determine status of several items. (

Table C-2. Facilities assessment analysis of buildings and structures at the Power Burst Facility.

Operational Designation	Description	Closure Owner	Notes	Screening Criteria
Waste Reduction Operations Complex (PBF Control Area) Mission ends 2015				
PBF-601	Control building and addition	WROC	See Footnotes a and b, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area standard operating procedures (SOPs) LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	1
PBF-602	Well and pump house	WROC	See Footnotes a and b, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	1
PBF-614	Well and Pump House No. 2	WROC	See Footnotes a and b, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	1
PBF-6 26	Storage building	WROC	See Footnotes a and b, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	1
PBF-632	Office support building	WROC	See Footnotes a and b, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	1
PBF-638	Pump house	WROC	See Footnotes a and b, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	1
PBF-641	New pump house	WROC	See Footnotes a and b, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	1
PBF-703	Substation	CFA Power Management and WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF-707	Substation	CFA Power Management and WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF-717	Water storage tank	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	1
PBF-718	Meteorological tower	DOA	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF-743	Fuel oil tank	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF-740	Fuel oil tank	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF-742	Fuel oil tank	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF-744	Septic tank	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4

Table C-2. (continued).

Operational Designation	Description	Closure Owner	Notes	Screening Criteria
PBF-745	Seepage pit	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF-746	Seepage pit	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF-747	Seepage pit	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF-748	Seepage Pit	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF-767	Septic tank	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	4
PBF 768	400,000-gal water storage tank	WROC	See Footnotes b and h, LMITCO (December 1996b), PBF Operating Manual (PBF administrative area SOPs), LMITCO (August 1997a), DOE-ID (1997), and Martinson (1997).	1
PBF Reactor Area (SPERT-I) Mission ends 2007				
PBF-604	Terminal building	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4
PBF-606	Instrument building	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4
PBF-616	Storage	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4
PBF-617	Hazardous materials storage	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4
PBF-619	Reactor control	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4
PBF-620	Reactor building	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997). Site has asbestos and radiological contamination. ^e	4
PBF-621	Emergency generator	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4
PBF-624	Auxiliary building	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4
PBF-625	Maintenance and storage	PBF Reactor	See Footnotes b and d and Martinson (1997). Site has asbestos contamination (diesel generator muffler). ^e	4
PBF-627	Gas cylinder storage	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4
PBF-629	PBF stack gas monitor	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4
PBF-634	Firewater pump house	PBF Reactor	See Footnotes b and d, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4

Table C-2. (continued).

Operational Designation	Description	Closure Owner	Notes	Screening Criteria
PBF-704	Substation	CFA Power Management and PBF Reactor	See Footnotes b, c, and h; LMITCO (December 1996b); PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997).	4
PBF-719	Substation	CFA Power Management and PBF Reactor	See Footnotes b, c, and h; LMITCO (December 1996b); PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997).	4
PBF-720	Cooling tower	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997).	4
PBF-722	Fuel oil tank	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997).	2
PBF-724	Septic tank	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997).	2
PBF-730	Reactor primary water storage tank	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997). The site has radiological contamination inside and asbestos contamination outside. ^c	2
PBF-733	Evaporation pond	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997). The pond was remediated in 1995, and the site has been seeded. ^c	5
PBF-732	Hot waste storage tank	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997). The site has radiological contamination. ^c	2
PBF-734	Water storage tank	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997).	2
PBF-735	Seepage pit	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997).	2
PBF-736		PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997).	2
PBF-737	Fuel oil tank	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997).	2
PBF-749	5,000-gal diesel fuel tank	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997). The tank was in excellent condition when it was removed 4 years ago. The soil beneath the tank was inspected and no diesel stains were found. The pipes were removed to the building. ^c	2

Table C-2. (continued).

Operational Designation	Description	Closure Owner	Notes	Screening Criteria
	125,000-gal evaporation tank	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), PBF Operating Manual; Mobley (1971); LMITCO (August 1997b); DOE-ID (1997); and Martinson (1997). The tank is an open-top type made from galvanized steel. The tank is approximately 5 ft high and 25 ft in diameter and is equipped with a double synthetic liner inside it and a leak detection system under it. ^e	2
Waste Engineering Development Facility (SPERT-II) Mission ends 2015				
PBF-612	WEDF	WROC	See Sato (1992), Footnote b, RCRA (42 USC § 6901 et seq.), LMITCO (December 1996b), LMITCO (August 1997a), LMITCO (July 1997), Monson (1996), DOE-ID (1997), and Martinson (1997).	4
PBF-710	Fenced transformer area	CFA Power Management and WROC	See Footnotes b, c, and h; LMITCO (December 1996b); WROC Lead Storage Facility Manual; LMITCO (August 1997a); LMITCO (July 1997); Monson (1996); DOE-ID (1997); Martinson (1997); and Sato (1992).	4
PBF-751	Radioactive liquid storage tank	PBF Reactor	See Footnotes b and i, LMITCO (December 1996b), WROC Lead Storage Facility Manual, LMITCO (August 1997a), LMITCO (July 1997), Monson (1996), DOE-ID (1997), Martinson (1997), and Sato (1992). The mission will continue until 2007.	4
PBF-752	Fuel oil tank	WROC	See Footnote b, LMITCO (December 1996b), WROC Lead Storage Facility Manual, LMITCO (August 1997a), LMITCO (July 1997), Monson (1996), DOE-ID (1997), Martinson (1997), and Sato (1992).	4
PBF-760	Seepage pit	WROC	See Footnote b, LMITCO (December 1996b), WROC Lead Storage Facility Manual, LMITCO (August 1997a), LMITCO (July 1997), Monson (1996), DOE-ID (1997), Martinson (1997), and Sato (1992).	4
Waste Experimental Reduction Facility (SPERT-III) Mission ends 2015				
PBF-609	WERF	WROC	See RCRA (42 USC § 6901 et seq.), LMITCO (December 1996b), DOE-ID (1997), Martinson (1997), and Footnote b.	4
PBF-622	WERF metal processing	WROC	See RCRA (42 USC § 6901 et seq.), LMITCO (December 1996b), DOE-ID (1997), Martinson (1997), and Footnote b.	4
PBF-623	WERF Waste Storage Facility	WROC	See RCRA (42 USC § 6901 et seq.), LMITCO (December 1996b), DOE-ID (1997), Martinson (1997), and Footnote b.	4
PBF-635	Storage building	WROC	See RCRA (42 USC § 6901 et seq.), LMITCO (December 1996b), DOE-ID (1997), Martinson (1997), and Footnote b.	4
PBF-640	Storage shed	WROC	LMITCO (1997a), LMITCO (December 1996b), DOE-ID (1997), Martinson (1997), and Footnote b.	4

Table C-2. (continued).

Operational Designation	Description	Closure Owner	Notes	Screening Criteria
N/A	Numerous cargo storage units	WROC	See RCRA (42 USC § 6901 et seq.), LMITCO (December 1996b), DOE-ID (1997), Martinson (1997), and Footnotes b and f.	4
PBF-705	Fuel oil tank (4,000 gal)	WROC	See Footnotes b and h, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, DOE-ID (1997), and Martinson (1997).	4
PBF-708	Substation	CFA Power Management and WROC	See Footnotes b and h, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, DOE-ID (1997), and Martinson (1997).	4
PBF-709B ^j	Fuel oil tank	WROC EM-30	See Footnotes b and h, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, ^{09X} DOE-ID (1997), and Martinson (1997). The underground storage tank has been filled with sand and abandoned in place because of its close proximity to a power substation. ^k	4
PBF-711	Fuel oil tank (300 gal)	WROC	See Footnotes b and h, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, DOE-ID (1997), and Martinson (1997).	4
PBF-754	Septic tank	WROC	See Footnotes b and h, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, DOE-ID (1997), and Martinson (1997).	4
PBF-755	WERF exhaust stack north	WROC	See RCRA (42 USC § 6901 et seq.), Footnote b, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, DOE-ID (1997), and Martinson (1997).	4
PBF-756	WERF exhaust stack south	WROC	See RCRA (42 USC § 6901 et seq.), Footnote b, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, DOE-ID (1997), and Martinson (1997).	4
PBF-761	Spray dryer absorber structure	WROC	See RCRA (42 USC § 6901 et seq.), Footnote b, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, DOE-ID (1997), and Martinson (1997).	4

Table C-2. (continued).

Operational Designation	Description	Closure Owner	Notes	Screening Criteria
PBF-763	Septic tank and lift station (active)	WROC	See RCRA (42 USC § 6901 et seq.), Footnote b, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, DOE-ID (1997), and Martinson (1997).	4
PBF-765	WERF exhaust stack east	WROC	See RCRA (42 USC § 6901 et seq.), Footnote b, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, DOE-ID (1997), and Martinson (1997).	4
PBF-767	?	WROC	See RCRA (42 USC § 6901 et seq.), Footnote b, LMITCO (December 1996b), WERF Operating and Maintenance Manual, LMITCO (April 1997), LMITCO (August 1997a), LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), MWSF/Portable Storage Units Facility Manual, DOE-ID (1997), and Martinson (1997). The mission will be continued as needed.	4
PBF-770	Leach field for septic tank	WROC		4
Mixed Waste Storage Facility (SPERT-IV) Mission ends 2015				
PBF-613	Mixed waste storage facility	WROC	See RCRA (42 USC § 6901 et seq.), LMITCO (December 1996b), DOE-ID (1997), Martinson (1997) and Footnote b.	4
N/A	Numerous cargo storage units	WROC	See RCRA (42 USC § 6901 et seq.), LMITCO (December 1996b), DOE-ID (1997), Martinson (1997) and Footnotes b and g.	4
PBF-713	Substation	CFA Power Management	See Footnotes b, c, and h; LMITCO (December 1996b); MWSF/Portable Storage Units Facility Manual; LMITCO (June 1997); LMITCO (August 1997a); LMITCO (November 1996); <i>INEEL Environmental Compliance Planning Manual</i> ; DOE Order 5400.1; DOE Order 5500 series; and 40 CFR 122.26.	4
PBF-716	Fuel oil tank (tech. Site info.) or blowdown pit (CERCLA list)	WROC	See RCRA (42 USC § 6901 et seq.), LMITCO (December 1996b), MWSF/Portable Storage Units Facility Manual, LMITCO (June 1997), LMITCO (August 1997a), LMITCO (November 1996), <i>INEEL Environmental Compliance Planning Manual</i> , DOE Order 5400.1, DOE Order 5500 series, 40 CFR 122.26, and Footnote b. The blow down pit and any contamination removed by force account.	7
PBF-758	Leaching pond	WROC	See LMITCO (December 1996b), MWSF/Portable Storage Units Facility Manual, LMITCO (June 1997), LMITCO (August 1997a), LMITCO (November 1996), <i>INEEL Environmental Compliance Planning Manual</i> , DOE Order 5400.1, DOE Order 5500 series, 40 CFR 122.26, and Footnote b.	4

Table C-2. (continued).

Operational Designation	Description	Closure Owner	Notes	Screening Criteria
PBF Utilities				
PBF-608	Substation control house	Power Management Central Facilities Area and WROC	See Footnote c.	4
Electric power poles	Overhead	CFA Power Management	See Footnote b, LMITCO (December 1996b), DOE-ID (1997), and Martinson (1997).	4
Telephone poles	Overhead	CFA	See Footnotes b, h, and i; LMITCO (December 1996b); DOE-ID (1997); and Martinson (1997).	4
Telephone lines	Underground	CFA	See Footnotes b, h, and i; LMITCO (December 1996b); DOE-ID (1997); and Martinson (1997).	4
Alarm wires	Overhead	WROC	See Footnotes b, h, and i; LMITCO (December 1996b); DOE-ID (1997); and Martinson (1997).	4
Fiber optics cable	Underground	CFA	See Footnotes b, h, and i; LMITCO (December 1996b); DOE-ID (1997); and Martinson (1997).	4
Control cables	Underground	WROC	See Footnotes b, h, and i; LMITCO (December 1996b); DOE-ID (1997); and Martinson (1997).	4
Instrument cables	Underground	WROC	See Footnotes b, h, and i; LMITCO (December 1996b); DOE-ID (1997); and Martinson (1997).	4
Grounding cables	Underground	CFA Power Management		4
Raw water line—active	Underground	CFA	See Footnotes b, h, and i; LMITCO (December 1996b); DOE-ID (1997); and Martinson (1997).	4
Raw water line—inactive	Underground	CFA	See Footnotes b, h, and i; LMITCO (December 1996b); DOE-ID (1997); and Martinson (1997).	4

a. The building was never used to store hazardous or radiological waste and will be demolished as a nonhazardous, nonradiological office building.

b. Dietz, C. G., February 19, 1998, Interdepartmental e-mail to C. L. Hicks, Lockheed Martin Idaho Technologies Company.

Summarizes two telephone conversations between C. G. Dietz and C. L. Hicks on September 10, 1997, that (telephone call No. 1) the demolition and subsequent confirmation sampling of PBF areas will be achieved by D&D based on best available information and that (telephone call No. 2) (a) all oil-filled transformers have been replaced and sites cleaned, (b) all underground storage tanks have been replaced and the sites cleaned except for the 10,000-gal tank at the PBF Reactor Area, and (c) cleanup of leakage and spillage from tanks at PBF-612 and PBF-601, which exceeded limits, was not feasible because of the nature of the lava rock. The State of Idaho was notified of the limits being exceeded, which resulted in the installation of monitoring wells on both sides.

c. Dietz, C. G., November 13, 1997, Interdepartmental e-mail to M. E. Gregory, "Power Management Interface for ARA/PBF Areas," Lockheed Martin Idaho Technologies Company.

Delineates Power Management's ownership of equipment at ARA and PBF.

d. There is no closure document for the facility. The fuel will be removed, the systems will be drained and closed, and the building will be stabilized, after which a meeting will be held with D&D personnel and details for taking down the buildings and improvements will be agreed upon.

Table C-2. (continued).

e. G. D. Gerber inspected the site on October 15, 1997.

f. The units will be used as required to store low-level waste until it can be treated and disposed of.

g. The units will be used as required to store mixed waste until it can be treated and disposed of.

h. The designated item is assumed to be noncontaminated by radioactive or hazardous materials and will be removed or disposed of the same as if it were a commercial installation.

i. There is no closure plan for the facility. The fuel will be removed, the systems will be drained and closed, and the building will be stabilized, after which a meeting will be held with D&D personnel and details for taking down the buildings and improvements will be agreed upon.

j. The PBF-709A building was removed.

k. WERF operations manager, October 20, 1997.

l. Electrical power and telephone poles and other utilities within facility perimeter fences are assumed to be the responsibility of the facility manager.

Table C-3. Auxiliary Reactor Area CERCLA sites.

CERCLA Site	Description	Notes
ARA-I		
ARA-01	Evaporation pond	The line to the pond is still in place, but whether it is capped is unknown. An 8-in.-diameter pipe with a cap that is about 2 ft high and an 8-in.-diameter galvanized pipe about 6 in. high and about 20 ft in front of the end of the pipe berm in the pond were observed. ^a Co-located interferences include sewer, water, and power lines.
ARA-02	Septic tank and seepage pit	The drain line from ARA-627 was cut off at some distance from the building and not capped. ^a In addition, the drain line from the hot shop is assumed to still be connected. ^b
ARA-03	Lead sheet area	The removal action is completed.
ARA-04	Chlorination facility	The chlorine facility is still in place. ^a
ARA-05	Evaporation pond	
ARA-23	Radiological soils and subsurface structures in and around ARA-I and ARA-II	The following potential sources will be addressed:
	ARA-I—potential PCB site	Characterization report for ARA-I (Vega 1995, p. 4). A review of all detailed engineering pertaining to this potential site was conducted, which provided no additional information. For additional information on CERCLA sites, see Vega (1995).
	ARA-I—potential lead site	Characterization report for ARA-I (Vega 1995, p. 35). A review of all detailed engineering pertaining to this potential site was conducted, which provided no additional information. For additional information on CERCLA sites, see Vega (1995).
	ARA-I—Possibly previously unknown underground tank	See Footnote c. As part of D&D, the removal of a copper line is under way that may identify an underground storage tank.
	ARA-II temporary offices and trailer sewage system	See as-built site drawing 150029 (1959). Sanitary waste drain line, septic tank, and seepage pit from a temporary office facility. This potential site is located across Fillmore Boulevard from ARA-II. ^{c,d} Further investigation using ground penetrating radar is recommended.
	ARA-II drain line and 1,000-gal carbon steel retention tank	See as-built site drawing 150713 (1960) and Footnote e. The tank has been removed under D&D but the line appears to be in place.

Table C-3. (continued).

CERCLA Site	Description	Notes
ARA-II		
ARA-06	SL-1 Burial Ground	Remediated under a record of decision (ROD)
ARA-07	Sewage pit	Physical hazards may be mitigated by the removal or filling of the pit.
ARA-08	Sewage pit	Physical hazards may be mitigated by the removal or filling of the pit.
ARA-09	Sewage pit	The tank and pipe on both sides of the tank were removed. The pipes remaining after the removal action were not capped. ^a
ARA-10	Septic tank	The tank and pipe to the interconnecting pipe to the northeast were removed. ^a
ARA-11	Septic tank	The septic tank and all piping to the facility fence were removed. ^a
ARA-19	Tank fuel oil or radiological contamination	The tank was removed along with about 4 to 5 ft of piping to the west. The pipe remaining was left uncapped. ^a Confirmation sampling was performed.
ARA-III		
ARA-12	Leach pond	Two drain lines
ARA-13	Leach field and septic tank	Physical hazards may be mitigated by the removal or filling of the tank.
ARA-14	Septic tank and drain	Only distribution lines remain.
ARA-15	Radionuclide tank	The tank was removed during December 1993.
ARA-16	Radionuclide tank	The tank was removed during December 1993.
ARA-24	Surface soils around ARA-III	
ARA-IV		
ARA-20	Leach pit	Only the base ring remains. All other aspects of this site have been removed by D&D.
ARA-21	Septic tank and leach pit	
ARA-22	Septic tank and leach pit	

a. R. V. Nelson performed an inspection of the site on October 15, 1997.

b. The assumption was made by C. G. Dietz.

c. Jones, R. K., January 15, 1998, Interdepartmental e-mail to F. L. Webber, Lockheed Martin Idaho Technologies Company.

d. During a site visit on October 10, 1997, the following was observed:

- The white wooden fence surrounding the AEC monument for this area may need some repairs.
- A mound of dirt 4 ft high, 20 ft in diameter, and about 100 ft from the west of the ARA-II fence. The status of the mound is unknown.

e. Kraft, M. S., December 23, 1997, Interdepartmental e-mail to C. G. Dietz, "ARA-II Tank Surveys," Lockheed Martin Idaho Technologies Company.

Summarizes information from nonintrusive surveys conducted at ARA-II and ARA-IV sites.

Table C-4. Power Burst Facility CERCLA sites.

CERCLA Site Code (Operational Designation)	Description	Management Control	Potential Co-located Interferences
Power Burst Facility Control Area			
PBF-32 (PBF 742)	Fuel oil tank	WROC	Active system—a power and telephone pole, water and fuel lines
Power Burst Facility Reactor (SPERT-I)			
PBF-05 (PBF-301)	Warm waste injection well	WROC Lead Storage Facility Manual	Power and instrument cables, warm waste line
PBF-08 (PBF-731)	Corrosive waste sump	WROC Lead Storage Facility Manual	Active system—corrosive waste line to evaporation tank
PBF-09 (PBF-728)	Septic tank and drain field	WROC Lead Storage Facility Manual	Control and instrument cable from control area, grounding cable, control and instrument cable, sewer line, and raw water line
PBF-11 (PBF-750)	SPERT-I seepage pit	WROC Lead Storage Facility Manual	Raw water line, control and instrument cable, and grounding cables
PBF-15 (PBF-302)	Corrosive waste injection well	WROC Lead Storage Facility Manual	Edge of road and corrosive waste line to and through well casing
Waste Engineering Development Facility SPERT-II			
PBF-14 (PBF-612)	Abandoned fuel oil tank	WROC	Grounding wire, telephone and fire alarm cable, raw water line, cold waste line, fuel oil supply, and return line
PBF-16 (PBF-733)	Leach pond	WROC	Abandoned warm waste line, grounding line, and raw water line
PBF-17 (PBF-725)	Septic tank and seepage pit	WROC	Active system—sewer line
PBF-31	Fuel oil tank. The tank was removed.	WROC	Cold waste, ground line, and instrument cable
Waste Experimental Reduction Facility (SPERT-III)			
PBF-709	Fuel oil tank. The tank was abandoned and filled with sand.	LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), and MWSF /Portable Storage Units Facility Manual	Power pole, raw water line, and sewer line

Table C-4. (continued).

CERCLA Site Code (Operational Designation)	Description	Management Control	Potential Co-located Interferences
PBF-27	The tank was abandoned and filled with sand.	LMITCO (November 1996), LMITCO (February 1997), LMITCO (March 1997), and MWSF /Portable Storage Units Facility Manual	Raw water line
MWSF SPERT IV			
PBF-24 (PBF-716)	Blow down pit. The pit has been removed.	LMITCO (November 1996)	Underground power (warm waste) line has been removed to the outside of the building). The tank is in close proximity.
PBF-25 (PBF-727, 757)	Septic tank and leach pit	LMITCO (November 1996)	Active system—sewer line

C-6. REFERENCES

- 42 USC § 6901 et seq., October 21, 1976, "Resource Conservation and Recovery Act (Solid Waste Disposal Act)," *United States Code*.
- 42 USC § 9601 et seq., December 11, 1980, "Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA/Superfund)," *United States Code*.
- 40 CFR 116, *Code of Federal Regulations*, Title 40, "Protection of the Environment," Part 116, "Designation of Hazardous Substances."
- 40 CFR 122.26, *Code of Federal Regulations*, Title 40, "Protection of the Environment," Part 122, "EPA Administered Permit Programs: The National Pollutant Discharge Elimination System," Subpart .26, "Storm Water Discharges."
- 40 CFR 302, *Code of Federal Regulations*, Title 40, "Protection of the Environment," Part 302, "Designation, Reportable Quantities, and Notification."
- 40 CFR 355, *Code of Federal Regulations*, Title 40, "Protection of the Environment," Part 355, "Emergency Planning and Notification."
- 40 CFR 372, *Code of Federal Regulations*, Title 40, "Protection of the Environment," Part 372, "Toxic Chemical Release Reporting: Community Right-to-Know."
- U.S. Department of Energy Order 5400.1, "General Environmental Protection Program," November 9, 1988.
- U.S. Department of Energy Order 5480.2A, "Radioactive Waste Management," September 26, 1988.
- U.S. Department of Energy Order 5480.23, "Nuclear Safety Analysis Reports," April 30, 1992.
- U.S. Department of Energy 5500 series orders on emergency preparedness.
- U.S. Department of Energy Standard DOE-STD-1027-92, "Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports," December 1992.
- U.S. Department of Energy Standard DOE-EM-STD-5502-94, "Hazard Baseline Documentation," August 1994.
- DOE-ID, December 4, 1991, *Federal Facility Agreement and Consent Order and Action Plan*, U.S. Department of Energy Idaho Field Office, Region 10, U.S. Environmental Protection Agency, Idaho Department of Health and Welfare.
- DOE-ID, April 30, 1997, *Comprehensive Facility and Land Use Plan*, DOE/ID 10401, online at <http://eris04/97cflup/main.html>, U.S. Department of Energy, Idaho Operations Office.

Drawing Index Number 102530, December 1, 1959, As-Built Drawing, "ARE Area Waste Systems-Outside Services Waste Nitrogen Area Piping Plan No. 1," Drawing Number 880-Area/GCRE-303-3, Aerojet-General Corporation, Architect-Engineer Division, Covina, California.

Drawing Index Number 102565, December 1, 1959, As-Built Drawing, "ARE Area Control Building Plumbing Plan," Drawing Number 880-Area/GCRE-607-P-1, Aerojet-General Corporation, Architect-Engineer Division, Covina, California.

Drawing Index Number 102647, July 31, 1958, As-Built Drawing, "ARE Area Reactor Building Waste Disposal System Isometric," Drawing Number 880-Area/GCRE-608-P-22, Aerojet-General Corporation, Architect-Engineer Division, Covina, California.

Drawing Index Number 102706, March 1, 1960, As-Built Drawing, "A.R.E. Area," Drawing Number 961-AREA/SF-201-1, Norman Engineering Company, Beverly Hills, California.

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